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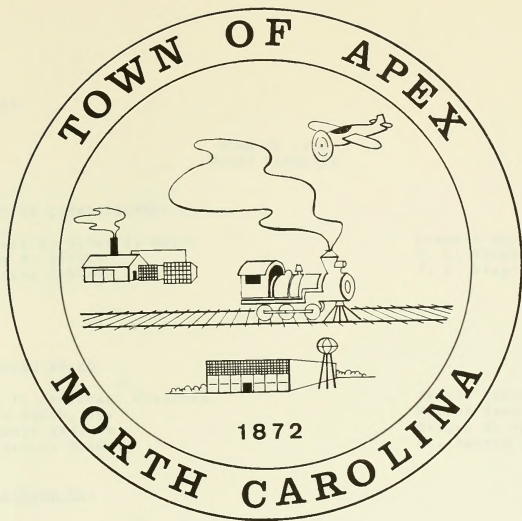
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# COMMUNITY FACILITIES PLAN

A P E X ,      N O R T H      C A R O L I N A



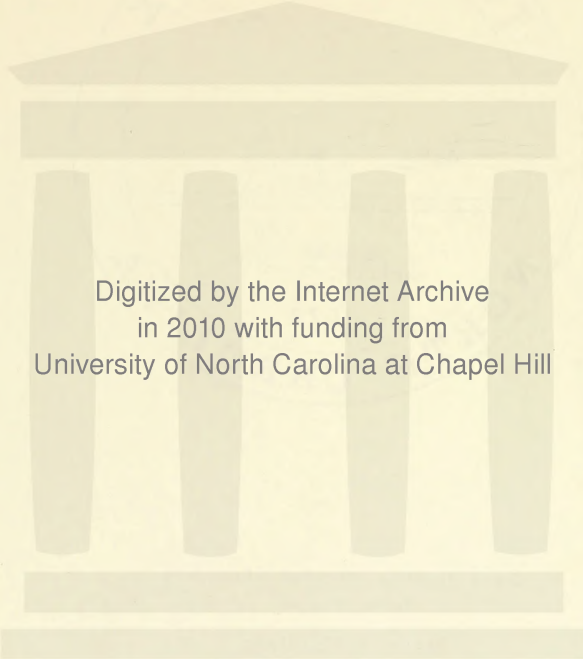


Award Winning Town Seal Proposal

Submitted By

Master Benny Jones

Apex, North Carolina



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Prepared for the:

TOWN OF APEX  
NORTH CAROLINA

TOWN BOARD OF COMMISSIONERS

Richard K. Helms, Mayor  
Henry F. DeWitt  
L. Wayne Johnson

Baswell Markham  
W. C. Rodgers  
E. O. Seagroves

Prepared by:

APEX PLANNING BOARD

Carl P. Holleman, Chairman  
W. J. Booth, Jr.  
Clarence Edwards  
William S. Goodwin

Calvin Perry  
Warren Tunstall  
Beulah M. Weaver  
Dr. Marvin T. Jones, Jr.

Technical Assistance by:

State of North Carolina  
Department of Conservation and Development  
Division of Community Planning  
George J. Monaghan - Administrator  
Victor Denton, Head - Central Area Office  
Don B. Ardell - Project Planner

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## F O R E W O R D

"The basic American attitude that private commerce is all that is useful doesn't make sense in this urban business. More and more it is community facilities -- good schools and libraries, roads and services -- that offer rewards, not the stores where whisky and motorboats are bought and sold. Prudent community investments in those facilities is what can make it possible to live in a civilized fashion in urban areas rather than just exist there."

Robert C. Wood  
White House Consultant  
Quoted in LIFE MAGAZINE  
December 24, 1965



# T A B L E   O F   C O N T E N T S

## COMMUNITY FACILITIES PLAN

	<u>Page</u>
Foreword	
Introduction	
Rationale, Study Objectives and Standards for Evaluation . . . . .	1
Municipal Building . . . . .	4
Existing Situation . . . . .	4
Standards . . . . .	4
Evaluation . . . . .	5
Recommendations . . . . .	5
Fire Protection . . . . .	7
Introduction . . . . .	7
Standards . . . . .	7
Existing Facilities . . . . .	8
Evaluation and Recommendations . . . . .	10
Police Protection . . . . .	13
Introduction . . . . .	13
Standards . . . . .	13
Existing Situation . . . . .	13
Recommendations . . . . .	14
Civil Defense and Rescue Squad . . . . .	16
Existing Situation . . . . .	16
Refuse Collection and Disposition . . . . .	18
Introduction . . . . .	18
Existing Situation . . . . .	18
Recommendations . . . . .	18





	<u>Page</u>
The Street System . . . . .	20
Existing Situation . . . . .	20
Recommendations . . . . .	20
Town Garage . . . . .	22
Existing Situation . . . . .	22
Evaluation and Recommendations . . . . .	22
Electricity . . . . .	23
Cemetery . . . . .	24
Hospital Facility . . . . .	25
Existing Situation . . . . .	25
Evaluation and Recommendations . . . . .	25
Public Library . . . . .	26
Introduction . . . . .	26
Standards . . . . .	26
Existing Situation . . . . .	27
Recommendations . . . . .	27
Water Supply, Distribution and Sewerage Treatment . . . . .	30
Introduction . . . . .	30
Existing Situation . . . . .	32
Supply . . . . .	32
Treatment, Storage and Consumption . . . . .	32
Distribution . . . . .	32
Storm Drainage . . . . .	33
Sanitary Sewerage System . . . . .	33
Evaluation . . . . .	34
Recommendations . . . . .	35
Recreation . . . . .	37
Introduction . . . . .	37
Guidelines for Recreation . . . . .	38
Existing Situation . . . . .	38
Recommendations . . . . .	39



	<u>Page</u>
School System . . . . .	42
Introduction . . . . .	42
Standards . . . . .	42
Existing Situation . . . . .	44
Recommendations . . . . .	46
Bibliography . . . . .	47



## I N T R O D U C T I O N

This is a report on the condition and adequacy of community facilities in the Town of Apex. It is an important part of a continuing effort by Town Officials to guide Apex's future growth and development in a planned, orderly fashion. That effort has so far resulted in a number of measures that should have beneficial effects on the Town's future economy and livability. These measures include a Zoning Ordinance, a Land Development Plan and the soon to be completed Central Business Area Revitalization Program.

This report contains the facts and recommendations for all existing community facilities serving the Town of Apex. Each facility studied fulfills an important public need. Each is fundamental to Apex's good health and future growth. All have significant effects upon the community's appearance, convenience and way of life. The facilities include a wide range of services, such as fire and police protection, health care, educational, cultural and utility needs; in short, community facilities insure the kind of environment, services and conveniences demanded by the discriminating Apex inhabitant and visitor.

A plan for community facilities can serve many purposes. A clear understanding of what now exists and what will be needed enables the responsible citizen to more easily appreciate the need for a given public expenditure. A Plan will also encourage long range capital programming for each affected department in order that improvements and new facilities can be worked into future budgeting with a minimum of difficulty. Finally, the facilities plan might prove useful in assisting Town Officials to articulate and secure the attainment of a valid set of civic goals.

A.V. BAUCOM  
ELEM. SCHOOL

HOSPITAL

WATER TREATMENT  
PLANT

WATER TANK

TOWN HALL

FIRE STATION

MEMORIAL  
PARK

TOWN  
DUMP

CEMETERY

APEX CONSOLIDATED  
SCHOOL

APEX HIGH  
SCHOOL

**APEX**

EXISTING  
COMMUNITY FACILITIES

MAP NO. 1

SEWAGE  
TREATMENT  
PLANT

400 800 1200  
SCALE IN FEET



### Rationale, Study Objectives and Standards for Evaluation

Several questions should be kept in mind while reviewing the succeeding account of Apex's community facilities. Are the present community facilities aiding in the prevention of blight? Are they properly located so as best to serve their intended functions? Would a population shift diminish the usefulness of any facility? Are they adequate in terms of their capacities to fulfill assigned tasks? What can be concluded about their structural condition? Are all age groups well served, including pre-school-aged children and the senior citizens? Are the facilities capable of serving more intensive residential, commercial and industrial development? When will given facilities need to be replaced or expanded? During what stage of Apex's future growth should it acquire more parks, larger police and fire stations, a better library and all the rest? Are available standards being considered and applied? What variables other than population and economics affect the provisions of facilities? Finally, what tangible and intangible effects do the lack of proper facilities have on community life? If Apex does not provide a desirable living climate, those able to leave the Town will do so, taking the tax base and their leadership ability with them. The answers to the above questions form a large part of the following report.

The specific objectives of this report are:

- a) To state the nature of existing facilities;
- b) To provide a source of basic information about each of the community facilities for the convenience of Town officials, interested citizens, business establishments, and others;
- c) To point out community facility deficiencies;
- d) To list Town policies on various phases of community facilities where specific policies have been established;



- e) To note the more important plans for improvement and expansion to meet deficiencies;
- f) To indicate areas in need of further study and to stress the importance of having policy guidance where community facilities are concerned;
- g) To comment upon the relationship between these facilities and the changes in the community that are now foreseen; and finally,
- h) To emphasize the important role which sound community facilities now and in the future will play in making Apex a good town in which to live and work.

The recommendations given are intended to insure that Apex will continue to provide a desirable living climate. Adequate community facilities would certainly be one important means to that end.

The foregoing report was developed with reference to the Land Development Plan and in consultation with planners, engineers and other interested technicians and laymen. The Development Plan, it will be remembered, was written in an attempt to project population increases, recommend future general land use locations and suggest the most efficient sites for future industrial, commercial and residential areas. It included a preliminary but comprehensive circulation system plan. This community facilities program should be considered a companion to that earlier plan.

In general, the standards used for judging the adequacy of facilities should satisfy four criteria:

- 1) They should adequately meet the need for which they are designed to serve;
- 2) They should be tested by experience;



- 3) They should be accepted by the populace and by expert practitioners;
- 4) They should be reasonably attainable.

Only standards which appear to have these qualities are employed in this report.





## M U N I C I P A L   B U I L D I N G

### Existing Situation

At the northern entrance to the Apex central business district is located the Town Hall, a multi-purpose, two story brick structure. This facility houses the administrative office of the Town Clerk and serves as headquarters for the police department. These two operations are the predominant uses found within the Municipal Building, however, portions are used for the storage of Town documents, jail, courtroom, meeting hall and residence for the night radio operator.

There are no off-street parking spaces available expressly for the use of persons doing business in the Town Hall or for the employees who work there. Two on-street spaces can be found immediately outside the Hall, but these are reserved for police vehicles.

The building was constructed in 1912 and has approximately 6,500 square feet of usable floor space.

### Standards

A town hall is best located when it is easily accessible to the people and near the central business area.\* If site factors permit extensions, all the better. There should be adequate space available to permit the efficient conduct of the public business and off-street parking should be available at no cost to the public.

---

Standards listed by the International City Managers Association.



#### valuation

The Town Hall is inadequate today and likely to become more so in the near future. This inadequacy is caused by the cramped space layout and the many functions headquartered on the first floor. The Town's population will markedly increase in the next decade or so. When this happens, the present facility, with its restrictive size, multi-purpose operation and absence of off-street parking, will even less efficiently meet the demands upon its offices.

Despite the above listed problems, the present location of the hall is excellent. In addition, the basic structure appears sound and its operation is efficient. There are no proposals or plans currently being discussed for the expansion of this facility or for an increase in staff personnel.

#### recommendations

It is recommended that the Town Hall be redesigned internally in order that more space be made available for the offices of the Town Clerk. The present spatial pittance now assigned to the Clerk's staff is totally inadequate in terms of both working area and noise level. The result is less than satisfying to those who work there and the citizen who visits to pay his taxes, fees or to just plain ask questions. The functional arrangement in this respect leaves much to be desired. The recently passed court reform measures will, among other things, result in the transfer of Apex's Court functions to the County seat in Raleigh. This means more space will become available in the municipal building for Town office space. It is recommended that the floor area now used for court and meeting purposes be given over to office usage, and that the second floor, now vacant, be developed as a Town gathering or meeting hall.



The police department, similarly situated in this facility, is also in need of more space for its staff and equipment; this however, will be discussed under a separate classification in the pages to follow.

The Town of Apex is in the process of having a complete study made of the central business district with the objectives being to secure more parking and better circulation of vehicles, as well as to obtain an improved appearance. The result of these efforts will be a plan that, among other things, will help make available parking for the Town Hall visitor.

By working for the implementation of these recommendations, the Town can avoid the confusion, excessive cost, and inconvenience of hasty adaptation should change suddenly bring about the need for an increase in the volume of current operations. Thought should at this time be given to the types of additional personnel who might be needed, where they would be secured and at what cost to the Town.

In summary, it can be said that the Town Hall is not at present in need of replacement or major repair but is in need of redesign. The facility also needs off-street parking and a more efficient, business-like office for the conduct of public business.

WATER TANK

## APEX

### FIRE PROTECTION

▨ HIGH VALUE DISTRICT

○ 3" HYDRANTS

● 6" HYDRANTS

MAP NO. 2





## F I R E P R O T E C T I O N

### Introduction

An alert, well-equipped fire fighting department makes human life and property safer and the cost of doing business lower. The case for the first part of this statement is obvious; the latter point is based on the fact that insurance costs are lower when a town has a good fire protection rating.

There are few hard and fast standards applicable to a small town. Nevertheless, we can generalize from the standards established by the North Carolina Fire Insurance Rating Bureau for larger communities and thus establish basic guidelines for a smaller community like Apex.

### Standards

The fire station should be in close proximity to the central business district. The maximum service zone for a fire station in larger towns is, according to the American Insurance Association, one mile for the industrial and commercial areas and one and three-fourths miles for residential districts; in Apex, North Carolina these standards can be met without difficulty because of its small size. Other national standards are as follows:

- a) the station location should relate to the Town's population density, its building intensity, traffic pattern, construction type and the existing degree of fire hazards;
- b) the station should be located close to the major and/or secondary thoroughfares, as well as on a sufficiently wide street to permit quick and safe entrance and exit of fire equipment;



- c) the station should not be located at major intersections nor should it be located on a one-way street;
- d) good sight distance should be possible (this requirement eliminates hilly sites and sharp, curving roads as station sites);
- e) berthing spaces should be accessible from both the front and rear, thus eliminating the need for backing trucks into the station;
- f) the station should be located on a site of sufficient size to allow for future expansion;
- g) fire limits should include closely built-up areas of predominantly business or commercial occupancy, together with all blocks surrounding these areas;\*
- h) all buildings within the high value district should have exterior walls of substantial fire-resistive quality.\*\*

#### Existing Facilities

The Town fire station is located at the northern end of the central business area. It is owned, maintained, equipped and operated by a private corporation known as the Apex Volunteer Fire Department. Its 42 man staff serves Apex and a reasonable distance beyond at the discretion of the fire chief (the one mile area outside the town limits is organized as the Hipex District). Today, as it has been since its founding in 1940, the Corporation is entirely dependent upon private donations and various fund raising programs.

---

\* "Recommended Method for Laying Out Fire Limits," American Insurance Association, September, 1956, p. 3.

\*\* Special Interest Bulletin on "Fire Limits," No. 227, American Insurance Association, April, 1957, p. 1.



The major equipment of the Apex Volunteer Fire Corporation consists of the following apparatus:

- a) a 1963 Ford truck with a pumping capacity of 750 gallons per minute. This truck also carries a 500 gallon booster tank, 400 feet of one inch hose, 600 feet of 1½ inch hose, 1,000 feet of 2½ inch hose and five ladders;
- b) a 1965 truck with 30 gallons of high expansion foam concentrate, 400 gallons of water, 400 feet of one inch hose, 250 feet of 1½ inch hose and two ladders.
- c) a 1,000 gallon capacity water truck, known as an International "10 wheeler."
- d) a 1940 pumper with a 500 gallon capacity owned by the Town and kept in reserve.

The total estimated value of all the Corporation's equipment is approximately \$58,000.00.

Each volunteer receives six hours training per month. The Apex citizenry are treated to a variety of educational programs oriented toward fire safety, including films, school lectures, poster displays and an annual parade. Considerable effort is made to alert people to the existence of fire hazards and prevention techniques.

Inspections are conducted on a yearly basis for business and industrial establishments. Records of building and electrical inspections are kept by the Town Manager. Residences wherein there is an invalid are also inspected at regular intervals, so long as the occupant desires this service. Buildings situated in the high value district must meet far higher standards of fire safety than is true in the remaining areas considered less subject to the possibility of a "contagious" or spreading fire.



### Evaluation and Recommendations

Apex's high value fire district and the rest of Town is fully within the acceptable service area, based on standards enumerated above. This is true for both the existing land use pattern and the pattern suggested for Apex's future development, as expressed in the Land Development Plan. However, it must be remembered that the area enveloped in a service zone relates only to spatial distance and does not consider how much time is required to move from one given point (the station's headquarters) to another point (the place of a fire). In Apex's case, this time factor could become very important because of the many blockages in the vehicular circulation pattern. Railroad rights-of-way, if occupied by a train at the time of a call could, combined with dead-end streets and the general congestion on the main thoroughfare (Salem Street), cause a temporary paralysis in the fire service. The only practical solution to this problem is speedy consideration and effectuation of the thoroughfare plan (See Map No. 3).

The informal agreement now extant between the fire fighting operations of Apex and Cary should be supplemented by a more formal mutual aid agreement more lasting in nature than an oral understanding between personalities. This would not only be advantageous for insurance purposes but would also assist both towns in their efforts to avoid needless duplication of expenses. Modern fire fighting equipment is very expensive; a clearly understood contract, drafted and executed in a spirit of cooperation will reduce these costs while affording maximum protection for all areas.

Apex's fire protection grade is a seven. Considering the Town's resources and present population this rating might be sufficient at the present time but should not complacently be accepted as a desirable end-state. In order to obtain a better rating,





costly improvements will have to be made, such as increasing the water reserve system. The Fire Insurance Bureau, in its report to the Town, notes that Apex would have to increase its available water supply, install an alarm system, pay a full-time staff member and take other such measures if it cares to improve its rating to a grade six. It is recommended that the Apex Volunteer Fire Department undertake to plan its own improvement program over a period of years in order that the Town may have this better rating at some known future date. Whether more people in the years to come will choose to make their homes in Apex is a question that official policy will answer and, by reasoned choice or haphazard inaction, determine. Whatever results will influence the future adjustments that will be required of the Apex Volunteer Fire Department.

A series of general conditions deserving of attention in the future should be noted. The Southeastern Underwriters Association's twenty-year use period policy limits the utility of a vehicle after a twenty year period. Thus, the 1940 Ford truck either must be replaced or continued as a reserve vehicle; otherwise, the Town's fire insurance rating could be jeopardized (the Town has a reserve fund of over \$6,300.00 for a new truck purchase. The full cost of a new vehicle of this nature will be in the neighborhood of \$17,000.00).

Apex is in need of street fire alarm boxes. Life and personal property would be more secure if an alarm system were installed. It must be remembered that not all Apex residents have ready access to a telephone. Also, Apex policy makers should not rule out the possibility of having to add considerably to the present facility. This building is too small to house a ladder-company sized truck, yet such a vehicle might become desirable if the rate of growth is rapid in the years to come.



Finally, it is recommended that Apex officials, and especially Fire Department officers, become involved with the central business area planning operations. These activities would beneficially affect the fire-fighting operation in Apex, and department personnel should speak for their interests as this central plan is being designed.



## P O L I C E P R O T E C T I O N

### Introduction

Considered vital to the welfare and good order of a town, the Police Department of Apex is responsible for the general protection of life and property, the prevention of unlawful behavior and anti-social acts, the apprehension of offenders and the preservation of the public peace.

### Standards\*

Small towns are considered to be adequately protected if:

- a) the police station is situated on a major traffic route for ease of access and unimpaired movement;
- b) the station is located at the periphery of the central business district;
- c) off-street parking is available and easily accessible;
- d) a police officer can be located at any time for emergency purposes.

### Existing Situation

The Department is located in the Municipal Building. It has a staff of three regular and six auxiliary officers. The annual budget for the police function is \$19,556.

Police equipment consists of a 1964 Ford Interceptor, assorted riot equipment and a radio system having the same frequency as that used by the Wake County A.B.C. Enforcement Division and the County Sheriff's Department. This system makes possible full voice communication between the various enforcement agencies in the Apex area.

\*Standards for this public service are derived from Hoppenfeld's "Planning Community Facilities."



In part owing to the omnibus image that former Town officials have had of the police function, and in part due to an archaic Town ordinance that defines police responsibilities very broadly, the Police Department today performs a wide variety of tasks.\* In addition to their more customary duties, they collect the privilege license tax, sell grave plots in the Town owned cemetery, act as a collector agency on delinquent light and water accounts, conduct bicycle safety programs, organize school patrols and other public education endeavors such as Operation Head-Start.

The Apex Police Department cooperates closely with the County Sheriff and the North Carolina Highway Patrol in enforcing the laws. Detention facilities are located in the rear of the Town Hall and are used for the temporary custody of suspects and minor miscreants. Suspects held on more serious charges are moved to the County jail in Raleigh.

The Department meets all recommended standards except standard "C" above; the police quarters, like other facilities in the Apex downtown, suffers from a lack of off-street parking.

#### Recommendations

If growth and development in Apex require an enlarged police department, quite a few changes will have to be made. Additional office space will be needed, more equipment will be desired and a new location might have to be found for detention quarters.

---

\*Written in 1930, the Ordinance defining police responsibilities includes the following passages:

- e - regulate the movement of teams and vehicles in the streets, bridges, parks, public squares and highways;
- f - arrest all street mendicants and beggars.





It would be wise to give consideration to the cost and feasibility of various alternative future interior designs, which could be done in cooperation with the general Town Hall remodeling program (suggested in a preceding section of this report).

More immediate matters should first be attended. The Department is involved in a number of functions that are subordinate and in some cases irrelevant to the Department's principal role as protector of life and property. These should be reviewed by the Town Commissioners. With the cooperation of state law enforcement offices, more precise and limited responsibilities ought to be assigned to the department, replacing the outdated ordinance that now defines police duties. Unrelated functions should be transferred to other departments, leaving the police force free to attend to its own specialized tasks.

As already noted in the fire protection recommendations, the railroad lines, street blockages and other impediments to effective vehicular movement are not only an inconvenience to the general public but a burden on efficient police service as well. To regulate and control traffic in Apex's confused circulation pattern requires too much diversion of police force time. As in the foregoing instance, thoughtful attention to the proposed Preliminary Plan for Apex is recommended.

There is also a very pronounced need for more off-street parking. In this respect the Police Department's site does not meet adequate standards. If (as recommended in the previous section) Apex's Town Hall is redesigned internally more office space should be available to the Police Department. Also, a new firing and practice range should be considered an important future appropriation. These steps are going to become crucial in future years when the effects of new development, expansion and change combine to increase the value of having a first rate Police Department.



## C I V I L . D E F E N S E   A N D   R E S C U E   S Q U A D

### Existing Situation

The Town of Apex does not at the present time have separate organizations for civil defense and rescue work.

Civil defense activities are directed at the county level. The Town's inactivity reflects either a general confidence in the wisdom of contemporary leaders to insure the peace or citizens' apathy. Whatever the root cause, the fact is that Apex's local participation is negligible. There is not a single shelter earmarked for emergency refuge, the civil defense organization headquartered within the Volunteer Fire Corporation is too small, there is no budget, the person in charge of civil defense receives little local support and training programs have been neglected. However, increased attention has in recent months been given to civil defense by the Fire Department, resulting in new programs. Volunteers will be sent to training schools for 12 weeks in order to better prepare the community for unexpected crises, and programs of public education are soon to be started. This expended effort should be closely coordinated with the Wake County civil defense organization.

Other efforts might be made in this direction. A civil defense program for a Town of Apex's size would normally consist of adult education and shelter management programs, police and fire department cooperation and training in medical self help. At least one member in each family should be knowledgeable in this latter area. It is recommended that Town officials investigate the merits of initiating an even more active program in order to complement the county activity in this regard. It is important to remember that an effective, well organized civil defense program would serve the community in the



event of a natural as well as a man made catastrophe. Floods, fires, diseases and other calamities could strike Apex just as they have struck elsewhere many times. The Town Officials should know in advance how they would cope with such dreadful but possible improbabilities.

The rescue operations are handled by the Town Fire Department. Although no special vehicles are available for rescue operations, no serious shortcomings have been noted in the present system, largely because there is a Wake County unit providing the region with full emergency coverage. The present arrangement is adequate for present Town requirements as no major problems have been encountered under this system. It is recommended that rescue squad activities be assigned either to the Volunteer Fire Chief or a subordinate of the Chief, in this way creating an identifiable person as the responsible local agent for this important function.



## REFUSE COLLECTION AND DISPOSITION

### Introduction

Every modern community is faced with the absolute necessity of removing its residential, commercial and industrial and other waste products. The obvious objectives of this collection and removal are to protect public health, reduce fire hazards, prevent stream pollution and conserve land; a more subtle objective of no less importance is to render livable and pleasant the towns in which we live.

### Existing Situation

Collection service is provided within the Town limits by the municipality. Residences are serviced once a week, industrial establishments twice each week and commercial businesses each working day. For this activity, street maintenance and other miscellaneous duties, 19 men are employed. Their equipment consists of one garbage truck, one dump truck and three pick-up trucks. All refuse, meaning solid waste as distinguished from liquid waste or sewage, is deposited on a 28 acre site located off N.C. route 55. Here the refuse, which consists of garbage, rubbish, ashes, dead animals and other animate and inanimate materials, is burned and packed into the ground. The residue from this operation is, in theory, organically inert.

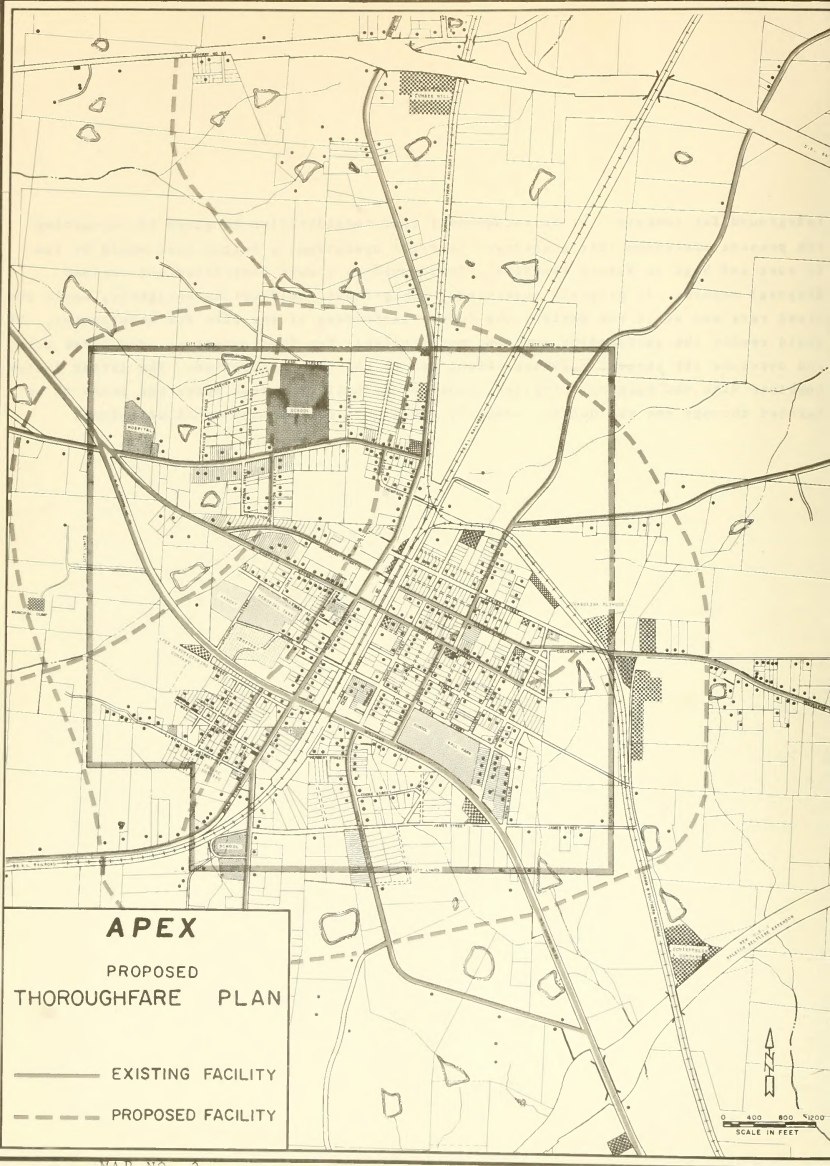
### Recommendations

The present disposition site and method of collection should be considered technically adequate for Apex's disposal needs for many years to come; however, the advisability of continuing the present method of disposal is open to question. Although it is the simplest disposal technique, the open dump method can render the land eventually malodorous, unsightly, and a health hazard for humans while creating a





fairground for rodents. It is recommended that consideration be given to converting the present operation into a sanitary landfill operation, a switch that would be low in cost and high in future benefits. This would be a more controlled and refined disposal method. If properly supervised, the process would not be unsightly, would not breed rats and would not destroy the future usefulness of the site for development. It would render the surrounding environs more suitable for development at some later date and overcome the present nuisance effect due to the dump's location. The latter factor, combined with the burning operation, causes occasional obnoxious odors and smoke to be carried through the residential areas by the Town's predominant southwest winds.

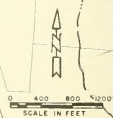


# APEX

## PROPOSED THOROUGHFARE PLAN

— EXISTING FACILITY

- - - PROPOSED FACILITY



## THE STREET SYSTEM

### Existing Situation

The Town of Apex maintains 12.1 miles of paved streets and 7.1 miles of unpaved streets. The State controls 6.3 miles of streets and all of these are paved. The latter include Salem and North Streets and parts of Hughes, James and Hunter Streets. Map number 4 indicates the location of these road jurisdictions.

Apex has no separate street department. The Police Department reports State maintained road deficiencies and dispatches its general duty crew of 19 to repair local roads. Revenue for the building of new and the maintenance of existing streets is provided by General and Powell Bill Funds. Major problems are posed by narrow streets, blind or dead ends, limited railroad crossings, needed pavings and few north-south carriers, especially in the central business area. Possible solutions for these deficiencies in the circulation patterns are offered in the Land Development Plan under the sub-title "Thoroughfare Plan" (see map no. 3).

### Recommendations

The amount of revenue presently available for needed land acquisition, street construction and continued maintenance is not sufficient for the execution of the Thoroughfare Plan in its entirety. The just passed \$300 million State Road Bond Issue will provide Apex with \$53,600. The Town officials should support this effort and begin now to plan for the most efficient use of these funds. In this way, Apex spokesmen will be able to argue their case for early consideration with the assurance that their needs are pressing and their plans realistic.



The Town leaders would do well to complement their plan effectuation efforts with priority listings for needed street improvements. These could be scheduled over a ten or fifteen year period and included in future budgets.



## T O W N   G A R A G E

### Existing Situation

Vehicular equipment belonging to the Town of Apex is stored or parked in two locations: 1) behind the Town Hall, and 2) off N.C. 55 (adjacent to the open dump). Both facilities are small, unattractive and unprotected.

### Evaluation and Recommendations

. The existing situation leaves something to be desired. The land behind the Town Hall could more productively be used for other purposes (i.e. visitor parking) and the out-of-town storage lot is too small and inconvenient. In short, a new location for public owned vehicles is in order. As the Town expands in size and as population grows, more equipment will have to be acquired. There should be sufficient and protected grounds at an easily accessible location for the storage of this equipment.

It is recommended that Town officials consider two alternatives in this regard. The first is to renovate and transfer equipment to the Armory Building and grounds situated southwest of the central business area. This facility, conveniently located, could serve as an effective maintenance building as well as a shelter for equipment during inclement weather. The land is already owned by the Town, the building is presently vacant and the two acre site would be sufficient for this purpose for many years to come. The second solution, less costly but subordinate to the first in long-term benefits, is to enlarge, restructure and protect the existing area in order to render it more suitable to serve its intended function. This would then be used until such time as a new and strategic location (such as is recommended above) is feasible.







## E L E C T R I C I T Y

The Town of Apex contracts for its electrical power from the Carolina Power and Light Company in Raleigh. Apex has the franchise for its area and this controls electrical services, lines and charges within and in a few instances, slightly beyond the corporate limits.

Many improvements have been made by the Town in recent years. More lines have been laid, service has been extended and plans are underway to increase and improve the lighting on Town streets. Salem Street will soon have a somewhat different look when the new poles and mercury vapor lamps replace the present systems. A better quality lighting should result.

It is recommended that this improved service program be encouraged and that an effort be made by Town electrical officials to improve the Town-Citizen relationship in this regard. A recent random survey of Apex households disclosed that a large percentage of residents felt rates were too high but that responsible officials "couldn't care less" about their grievances. Better communications between the servers and the served could alleviate this condition. It is also recommended that any downtown lighting changes on Salem Street be closely coordinated with the business district beautification planning now underway in the area.



## C E M E T E R Y

Although not a major function of local government, many towns in North Carolina do provide places for the burial of human dead. In many instances, this function has been assumed by towns owing to the default of earlier, private enterprises. In such cases, it becomes incumbent upon the town to maintain and care for the grounds.

Apex was forced into the cemetery "business" in a manner similar to that described above. Today, there is a 12 acre Town Cemetery, the result of two previously private owned graveyards that went out of business. Less than one-third of the space available for burials has so far been taken. Since this facility dates back to the early part of the century, it is likely that the remaining two-thirds will be adequate for Apex's needs for a long time to come.

Apex sells individuals graves in this cemetery for \$90.00. With the receipts from these sales, the Town is able to maintain the grounds, keep records, and assume over-all responsibility for the cemetery's administration. It is recommended that the Town continue to provide this service while employing certain of the funds from this operation to the beautification of the grounds. Many areas of the cemetery are in need of at least a degree of landscaping. If made to look attractive, this park-like setting could serve, in addition to its obvious function, as a place of quiet refuge for the living. A landscape architect should be retained for this purpose.



## H O S P I T A L   F A C I L I T Y

### Existing Situation

The local branch of the Wake County Memorial Hospital of Raleigh has served the needs of Apex's residents since its opening in 1962. It is an attractive facility, clean and provided with ample off-street parking far in excess of the required (by the zoning ordinance) two spaces per bed ratio.

The Hospital is staffed with 10 nurses (five of whom are part-time), four general practitioners and one surgeon. There are twenty beds, though less than half of these are usually occupied (the average occupancy rate last year was fifty percent of capacity). A number of minor additions and improvements have been made since its founding. Additional expansions can be effected when warranted as the Hospital is comfortably situated on a five acre tract in a suburban area of Town.

### Evaluation and Recommendations

The Wake County Branch Hospital in Apex is in a fine position to continue to effectively serve the area. It is well staffed, equipped and located for this purpose. However, it needs local support. The grounds are not as attractive as they could be given their pastoral setting and rolling topography. Volunteer assistance (from clubs, youth groups or other organizations) should be sought to remedy this situation and to exploit the natural beauty of the hospital site. In addition, the surrounding area must be protected from adverse land uses. The latter is a function of adult responsibility, especially those citizens responsible for the administration of the zoning ordinance. Every effort should be made to preserve the quiet character of the area, as ordained in the zoning ordinance for professional districts of this nature.



## PUBLIC LIBRARY

### Introduction

A library is vital to the public pride. It can be a significant asset to a Town's image and be of great interest to its youth. It is often the measure of the Town's cultural level.

Libraries in this country reflect the strength and growth of democratic society. A responsible and enlightened citizenry wants and needs to inform and educate themselves in order to build upon their social and cultural ideas. Libraries serve this intention.

### Standards

The American Library Association holds that a community (under 2,500 persons) library should serve five basic objectives: 1) education; 2) information; 3) research; 4) aesthetic appreciation; and 5) recreation.<sup>1/</sup> To do so it should meet seven criteria:<sup>2/</sup>

- 1) be freely available to all the people;
- 2) provide a means of self-education;
- 3) be convenient, accessible and comfortably designed;
- 4) stimulate study and research through guidance programs;
- 5) be staffed with at least one full-time, trained librarian;

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<sup>1/</sup> Public Library Service, American Library Association, 1962.

<sup>2/</sup> Interim Standards for Small Public Libraries, Public Library Association, 1962.





- 6) have a collection of at least two books per capita, 40 percent of which should be of a permanent reference nature;
- 7) be open to the public at least 15 hours per week.

#### Existing Situation

None of the standards enumerated above are being met in Apex for the simple reason that, for all intents and purposes, Apex has no library worthy of the name. No other aspect of the Town's public facilities and services is as poorly considered as is this one. In the past, there were two "libraries," one white and the other Negro. It is difficult to conjecture as to which of the two had least to offer.

In recent months, several efforts have been made to obtain "one facility for the entire community." Presumably, it would be designed so as to meet the standards governing local libraries. Unfortunately, there has been much disagreement as to where the library would best be located. A temporary site is expected to be selected during the interim period until such time as the best permanent location is found and agreed upon.

When the library begins operation, permanent or otherwise, it will be associated with the Olivia Rainey Library System. The present Town collection currently stored in the old Negro library and the Apex Woman's Club will be supplemented with volumes from the Olivia Rainey Library. In addition, bookmobile service will still be available as will all other related services available to Raleigh library patrons.

#### Recommendations

One recommendation is so important to the future status of Apex's public library that it alone will be offered in this report. It is that the final location for the



Town library be in the central business area on Salem Street between Chatham and Center Streets. This would be consistent with current efforts being made to improve the quality of the Apex shopping area, to enhance its appearance and to draw more people to it. A library would attract people to the area by giving the neighborhood a more diversified activity mix than can now be found in this purely business community.

Library studies in every town and city throughout the nation conclude that an in-town location "where the people are" is the best place for a library. We fully concur. There are several vacant buildings now available in the central area.

We suggest that the library trustees give immediate and continuing attention to the selection of a central area site. Such a location would richly enhance the value of the area to the citizens who inhabit it. A dynamic town, a growing population, an expanding commerce and an informed citizenry all demand a more intensive, convenient, and complete library than Apex has ever had. As previously noted, the Town leaders should view their library as an important aspect of Apex's livability as well as a measure of its quality.

For more information on the desirability on downtown library location, see any of the following books or reports:

- 1) Index of American Public Library Circulation, A.L.A. Bulletin, 51:640, September 1957.
- 2) Wheller, J.L., Effective Location of Public Libraries, pp. 1-24, 1958.
- 3) "A Beautiful Bookshop in Key Location" Publishers Weekly, 168:2209, November 26, 1955.



- 4) Minneapolis City Planning Commission, Survey and Report on the Location of a New Main Library, 1963, pp. 16-18.
- 5) Brasch, Mary E., A Statistical Study of the Central Library's Location in Relation to ...Use, Unpublished Master's thesis, Carnegie Library School, 1949, p. 40.



W A T E R S U P P L Y , D I S T R I B U T I O N  
A N D S E W A G E T R E A T M E N T

Introduction

The quality of water and its availability for human purposes are two of the most vital issues facing the country today. The issues are no less important to the people of Apex.

It is said that the supply of good water is so limited that demand for it will outstrip the supply of it by 350 billion gallons daily by the year 2000.\* This is happening principally because municipal, industrial and agricultural pollution is corrupting the nation's 90 major river basins. Scientists at the "Resources for the Future" Institute say that pollution has occurred because citizens have neglected to show a concern for better water management.\*\* There are three reasons for this lack of interest:

- 1) with the exception of treatment of raw water before distribution, the technology of municipal water supply has not changed a great deal since the Romans built their famous aqueducts over two thousand years ago;
- 2) the economic costs of urban water supply have been very low in relation to its worth in domestic, commercial and industrial uses;

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\*Article by Ben Price in the Raleigh News and Observer, September 5, 1965. Figures are taken from the report issued by the United States Senate Committee on Public Works.

\*\*J. W. Milliman, "Policy Horizons for Future Urban Water Supply," Resources for the Future, p. 110.





3) water supply and policy guidance has almost never been the subject of partisan debate.\* This traditional neglect is ending now as the above causes of dis-interest fade with the changed requirements of this new day. These changes have been noticed at the Federal level in the demand for and passage of remedial legislation and felt at the local level in the passage of bond issues for new water plants and related facilities. In recent years, Apex, too, has had to have water and sewerage system improvements, financed by bonds. What is the nature of Apex's water system, how adequate is it and what can be done to improve it? These questions are explored and answered in the following pages.

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\*Ibid.



## EXISTING SITUATION

### Supply

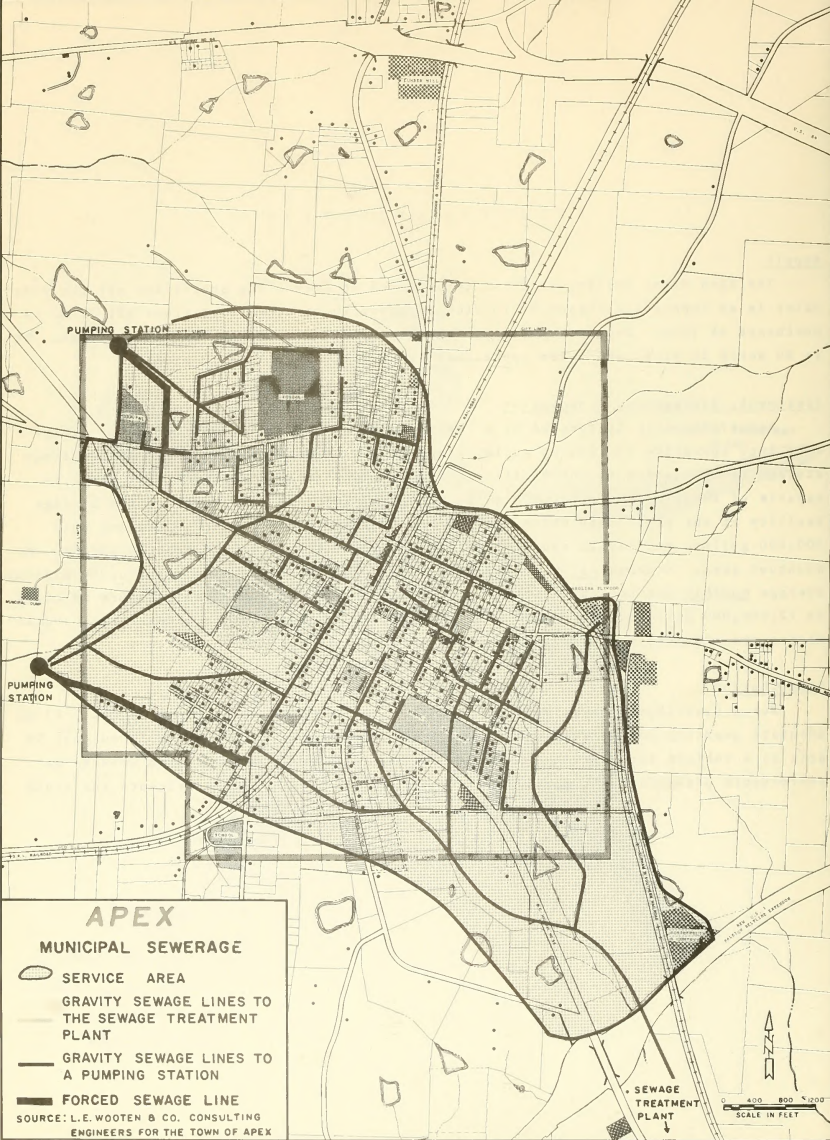
The Apex water system was first established in 1924. The source for all the Town's water is an impounding reservoir located adjacent to the treatment plant off U. S. 64 northeast of Town. This reservoir is supplied by rain, run-off and William Creek. It is 20 acres in size, and holds approximately 43,000,000 gallons of water.

### Treatment, Storage and Consumption

Reservoir water is treated by a "mechanical gravity rapid sand" process. This went into operation in 1924 as an important part of the water system and only a large storage tank adjacent to the facility has been added since that time. The plant is capable of treating up to 750,000 gallons of raw water per day; however, the storage facility at the plant into which treated water flows is capable of containing only 500,000 gallons per day in addition to the 100,000 gallon elevated tank located in the downtown area. Average daily consumption during the past 12 months was 200,000 gallons; average monthly use is approximately 6,000,000 gallons; and the yearly figure is close to 72,000,000 gallons. There are no noticeable monthly "peaks" in water usage. Water meters are attached to all serviced households, businesses and industries.





### Distribution

For a distribution system to be adequate, two major standards must be met: 1) an adequate quantity and 2) sufficient pressure. The system must be so designed that it acts as a vehicle transporting water to the consumers, providing desired amounts at comfortable pressures. It should allow two-way water flow to fire hydrants and avoid



## APEX

### MUNICIPAL SEWERAGE

-  SERVICE AREA
-  GRAVITY SEWAGE LINES TO THE SEWAGE TREATMENT PLANT
-  GRAVITY SEWAGE LINES TO A PUMPING STATION
-  FORCED SEWAGE LINE

SOURCE: L.E. WOOTEN & CO. CONSULTING  
ENGINEERS FOR THE TOWN OF APEX

SEWAGE  
TREATMENT  
PLANT

0 400 800 1200  
SCALE IN FEET



dead-end water main stoppages. Fire protection is related to water supply and distribution, for far more water is needed in cases of fire emergencies than that normally required by domestic, commercial and industrial uses.

Water is distributed over a service area that encompasses the Town limits and a portion of the fringe area as indicated on the map. A 10" main line, assisted by an automatic pump, takes treated water to the town. A gridiron water system of inter-connecting lines is noticeably lacking. Such a system would help to insure an adequate pressure throughout the lines and would prevent a general service loss in the event of a break in the lines.

#### Storm Drainage

The purpose of storm sewers is to channel the rain and over-flow water into a system of open and closed conduits in order that this flow may be discharged into selected run-off areas. The first storm sewers were installed in Apex in 1964. Currently four streets in town are provided with storm sewers: Center, Holléman, Chatham and Salem Streets.

#### Sanitary Sewerage System

The sewerage system in Apex has reflected the changing needs of a growing town. From 1924 until last year, all that was involved in waste disposal was a gravity flow system (aided by pumps) bringing sewage to Imhoff septic tanks. The advent of increased business and industry and the attendant population increases taxed this system until replacement became a necessity. The new plant is located just east of U. S. 1 between N. C. 55 and Middle Creek. It is an activated sludge facility, capable of treating sewage so as to cause a 98 percent reduction in solid organic wastes. It is built to



serve a population of 3,000. Two lift stations assist in the process of moving sewage to the plant for treatment. The design capacity of this plant for any 24 hour period is 600,000 gallons. All of the lines are gravity flow except the lines from the pumping stations that are used to carry the sewage over the divides into the drainage basin of the treatment plant.

#### Evaluation

The Wooten Company of Raleigh, a professional consulting engineering firm, has studied, recommended and built water related facilities in Apex for many years. As a result of their work and the forward-looking attitude of the Town public, Apex is in good shape with respect to treatment facilities for raw water and sewage. However, not all aspects of the water works system have been given equal attention. It is apparent that the water supply could very shortly become insufficient for Apex's needs. The present reserve capacity is 43,000,000 gallons; annual consumption is 72,000,000 gallons. Thus an additional reserve would surely be in order. Also, additional distribution lines for moving the treated water are needed, as are repairs to the older, leaking sewer lines.

Finally, it should be noted that although many feet of storm drainage lines have been laid, more lines are needed to prevent serious floodings. The simple road ditches of a passing age are unattractive, dangerous to vehicles and not conducive to higher property values. In addition, they no longer serve to carry the full storm loads as in the past. Moore and Saunders Streets are examples of streets still needing storm sewers.

Viewed as an interrelated system, however, it must be concluded that Apex is in a good position at the present time. With as much concern for tomorrow as has recently been shown, Apex should be able to overcome its limited supply and other, lesser problems





### Recommendations

The importance of a plentiful supply of clean water and an effective utility system in general does not require debate and persuasion in Apex. Its effect on good living, commercial strength and industrial growth is sufficiently understood and appreciated. Apex has a better than average water supply, distribution system and treatment plant at the present time; nevertheless, the inexorable demands of an unknown future make continued progress a rational necessity. The elected officials of Apex can make their Town's future less uncertain by using, among other tools, the public water system to structure development in desired directions. The Land Development Plan outlines general locations for various types of development. These sectors marked for growth are as follows:

- 1) for residential purposes, the vacant parcels in the highly developed central area of Town, the sizable drainage area north of Hunter and west of Salem Streets, and the two smaller basins between the Durham and Southern Railroad and McCullers Road. If only these general area location sites are promised the needed water lines, then desired development will be encouraged, facilitated and permitted to occur at minimum costs to municipal residents.
- 2) for business development, the present central area (this aspect is treated in greater detail in the Apex Central Business District Plan);
- 3) for industry, in areas adjacent to either a railroad or U. S. 1;
- 4) for social, cultural, and recreational development, areas with unique geographical features (such as north of the hospital along the creek) and adjacent to the present municipal park. Portions of the natural drainage areas will in this way be kept open and areas difficult and costly to serve will also be left undeveloped, thus preserving their use as storm run-off points. To conclude, it should be reiterated that a principal recommendation for planning the municipal water system in the years to come is to actively employ the utility system as an impetus for the realization of Apex's Development Plan.



It is further suggested that another engineering study be undertaken, aimed at determining the most efficient method for increasing Apex's available water supply. Coordination with the Federal Cape Fear flood control project might provide a solution to Apex's future raw water needs. The proposed dam at New Hope will create various water bodies within a few miles of Apex (six to twelve miles), one or more of which might prove suitable as a supplemental raw water supply (see map number 5). Early attention to the matter while the need is not yet critical will prevent the Town's residents from someday suffering from the water shortage hardships that today plague New Yorkers.

# MAP NO. 5

## EXAMPLES OF POSSIBLE WATER LINE CONNECTIONS\*

(Actual routes, if new Hope Basin were to be utilized, would be determined on the basis of detailed engineering criteria, such as topography, soil conditions, easement acquisitions, etc.)

\*\*\*\*\*

### LEGEND



### CAMP TANK RIVER BASIN, NORTH CAROLINA RESERVOIR MAP OF PROPOSED NEW HOPE PROJECT

1:25,000  
SHEET 1 OF 1  
U S ARMY ENGINEER DISTRICT, CHARLOTTE, N.C.

## R E C R E A T I O N

### Introduction

Recreation is a vital force in modern society. The State of North Carolina has shown a continued awareness of its importance to full community living and the public has demonstrated a corresponding eagerness to use the many opportunities provided. It is the purpose of this section to review for the reader the nature of Apex's recreation facilities, to compare them with accepted standards and to recommend guidelines toward more effective utilization of the Town's leisure resources.

A balanced community recreation program should involve every citizen in one way or another. Its purpose is to assist individual development through constructive, enjoyable expressions. One role of an active community is to acquire, develop and maintain parks and playfields, and to administer public recreation programs. Evidence of this State's concern for recreation can be inferred from the wording of the Recreation Enabling Law for North Carolina (Article 12, Section 160-156):

The lack of adequate recreational programs and facilities is a menace to the morals, happiness and welfare of the people of this state in times of peace as well as in times of war. The legislature, therefore, declares that in its considered judgement the public good and the moral welfare of the citizens of this State require an adequate recreation program and that the creation, establishment and operation of a recreation system is a governmental function and a necessary expense as defined by Article VII, Section 7, of the Constitution of North Carolina.\*

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\*Recreation Enabling Law of North Carolina.



#### Guidelines for Recreation\*

In applying State and National standards, one should be mindful that the particular characteristics of a Town's situation, such as population size, land or economic base and so forth must be fitted into a workable recreation plan capable of meeting the unique needs of individual communities. Considering these factors, a useful set of standards for Apex might be as follows:

- a) the program should serve age groups of both sexes, all races and all income groups;
- b) the program should be conducted throughout the year at indoor and outdoor centers and should serve the entire community;
- c) the parks or other recreation facilities should be conveniently located and easily accessible;
- d) adequate space must be provided for playing fields free of encumbrances, obstacles and similar barriers to free movement, surrounded by buffer zones to minimize the adverse effects of light, noise, and so forth;
- e) the recreation areas should present a pleasing appearance, both from within and without, even if only limited space is available for planting and other decorative features;
- f) long-range plans for park acquisitions and improvements should be in existence.

#### Existing Situation

There is a 6½ acre recreation and park facility in Apex known as the Cary C. Jones Memorial Park. It is well equipped and includes a swimming pool, tennis court, picnic

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\*Community Recreation in North Carolina, North Carolina Recreation Commission, Raleigh, North Carolina, 1960.







tables and similar conveniences and pleasures for the enjoyment of its patrons. It is accessible, attractive and useful to all age groups and sexes. It is, however, a private facility, is not tax supported and is not open to all the local public.

The Town of Apex has no public park. It has no developed public recreation area. There are no plans to develop a balanced program of public parks and recreation at the present time.

#### Recommendations

If the physical, mental and spiritual potentials of local citizens are to be developed;

If the incidence of youthful delinquency is to be reduced;

If adults are to be given an outlet for their tensions; and

If the senior citizens are to find meaning and purpose in their retirement years;

Then serious consideration should be given to the acquisition, development and operation of land capable of being employed as a Town Park and recreational facility. Such action by the Town Officials would not put Apex in a position of competition with the private park. Rather, it would increase the available recreational resources for those who already enjoy the Memorial Park while creating such resources for those who do not.

The Land Development Plan for Apex allows that a variety of site conditions are compatible with recreational usage. Areas with "unique geographical features" and areas "relatively flat" are acceptable for recreational usage.\* Most importantly, it was

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\*Land Development Plan for Apex, Division of Community Planning, Department of Conservation and Development, June, 1965.



pointed out in this study that a major locational standard for recreational uses is that such uses be founded "near the geographical center of areas they serve." The area least served at the present time wherein there is a concentration of population is the Negro section south of the downtown area. It is recommended that community facilities comparable to those existing in the private park be provided in this general area, with the intention that it will be available to and supported by all the people of Apex. Owing to the availability of land and the low value of existing structures, finding space for this purpose in the southern section of town should not be difficult.

It is further recommended that the Town create a Recreation Commission, which in turn should appoint a parks and recreation director to serve in the planning and management of a program.\* The Town might also profit by utilizing the wide range of technical services that are available through the North Carolina Recreation Commission in Raleigh.

Finances for a facility such as has been proposed would be through general taxation, supplemented by such sources as general obligation or revenue bonds, private financial and land donations and user fees (though care must be taken that such fees are not so high as to discourage those in modest circumstances from enjoying the facility's benefits).

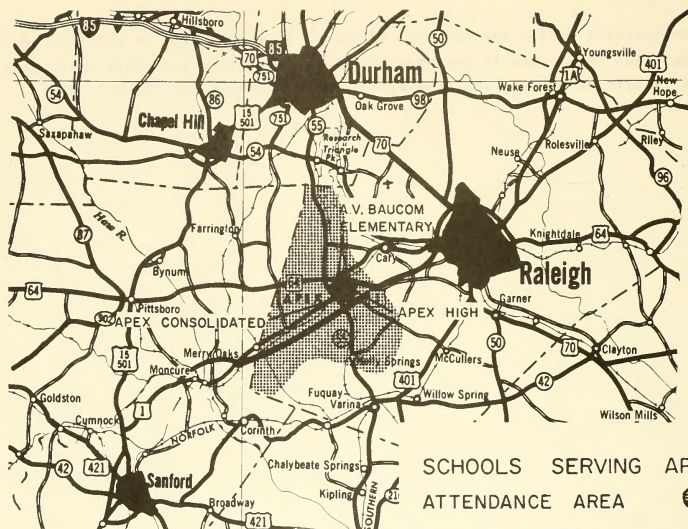
Once established, Apex would do well to jealously protect its park and recreation area against both public and private encroachment. This is an important resolution for the citizens to make at this time for Apex is likely to experience a considerable

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\*Permissive legislation giving Apex officials authority to so act exists under Section 160-156 of the North Carolina General Statutes.



population increase during the next two decades. More open land is going to be converted for urban uses. Now is the time to develop, maintain and protect park and recreational facilities for all the people, including those to come in the future.



# SCHOOLS SERVING APEX ATTENDANCE AREA

MAP NO. 6

## S C H O O L   S Y S T E M

### Introduction

Fine schools with stimulating teachers are crucial variables that will heavily influence the results of our quest for the good society. The need for excellence in schools and teachers is no less vital in Apex than it is in New York City. Though the measure of teacher quality cannot be discussed in this report, the adequacy of facilities and sites can be discussed and evaluated with respect to prevailing standards.

### Standards

Numerous institutions and accrediting agencies have published long lists of standards which cities and towns might consider before constructing and while operating educational facilities.

School Administrators in Wake County make use of the standards established by the Southern Association of Schools and Colleges, as well as those set forth by the Department of Public Instruction. These officials have adopted the following statement of principles:

- 1) That the education of our youth to their fullest potential is the collective responsibility of all our citizens.
- 2) That the training of our youth must by kind, quality and quantity be geared to prepare youth to meet life situations in a very rapidly changing world society.
- 3) That all youth have specific educational, emotional, physical, moral and spiritual needs which should be met when encountered, and they must be met in terms of youth, rather than adult standards.





- 4) That public education is the preserver and stabilizer of our system of free enterprise and our democratic way of life.
- 5) That the welfare and happiness of all boys and girls should be considered when shaping policies affecting public education.
- 6) That the appropriate educational experience for all our children and youth can be realized only through a carefully planned program geared to the principles of child growth and development in relation to the pupil's experiences.
- 7) That the Wake County School System should provide well equipped schools staffed by professionally competent teachers trained to guide all boys and girls to their optimum capacity.\*

These purposes are manifested in the Administration's continuing effort to maintain accreditation from the Department of Public Instruction and remain an active member of the Southeastern Association of Schools and Colleges. The following standards have been adopted by the Wake County Board of Education to enable Apex's schools and other in the County to meet the above noted statement of principles:\*\*

- 1) To design and build schools that are attractive, functional and conducive to learning.
- 2) To replace all Mobile Trailer Units and sub-standard classrooms.
- 3) To keep all buildings and grounds safe and free of hazards.

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\*Purposes enumerated in the Wake County Administrator's "Plan for Total School Improvement for Wake County Schools," 1965.

\*\*Ibid.



- 4) To locate schools and sites that are adequate in size and convenient and accessible to the pupil.
- 5) To continue the long-range program for buildings and acquisitions of sites.
- 6) To modify and renovate buildings to meet the demands of growth.

Other standards govern the planning and administration of new school plants. An Elementary school site should contain 12 to 15 acres of land. The student body should number between 450 to 500 pupils. Junior high schools should contain 35 to 40 classrooms on 30 to 40 acre sites and have enrollments of 750 to 1,000 pupils. Senior high schools should contain 40 to 50 classrooms on 35 to 50 acre sites with enrollments between 1,300 and 1,800 pupils. Children should be assigned on a geographical basis, as schools serve most economically when convenient to the population centers. It is not considered economical to expand existing schools on sites likely to be deficient within 20 years.

#### Existing Situation

Apex schools are administered by the Wake County Board of Education. This board is elected by a popular vote of the people of Wake County and is the policy making body of the schools. Local supervision is by the Apex Advisory Council.

Three schools now serve the educational needs of Apex youth. These three are the Apex High School, the Apex Consolidated School and the A. V. Baucom Elementary School. The Apex High School is one of only two Wake County high schools that is not accredited by the Southern Association of Schools and Colleges. This is primarily due to the current teacher shortage, however, efforts are being made to correct this situation.



An especially dangerous situation exists at the Apex Consolidated School. Railroad tracks belonging to the Seaboard Air Line Railroad Company run parallel to the school plant in such a manner as to completely block travel to the western part of Town (wherein reside a large number of school students). In addition to the obvious danger of the railroad's proximity to the school facility, there is an added element of risk caused by the absence of either buffer strips or pedestrian/vehicle overpasses. Children have been seen crawling under stopped freight trains in order to avoid long waits for the trains to move on and to avoid lengthy walks around the occupied tracks.

The chart below provides the reader with basic data on each school:

School	Predominant Type	Site Size	Year Built	Grades (Inclusive)	No. of Classrooms	Student Capacity	Present Enrollments	Major Improvements Planned
A. V. Baucom	White Elem.	18 Acres	1965	1-5	15	450	400	None
Apex Consolidated	Negro Elem. & High School	16 Acres	1928	1-12	42	1,000	943	\$75,000.00 Cafeteria '68
Apex High	White High School	15 Acres	1921	6-12	30	1,000	600	Athletic Facility \$175,000 '66



## R E C O M M E N D A T I O N S

Many social and political trends are going to affect the schools in Apex. These trends will require various changes to meet the new requirements, such as teacher increases, classroom additions and facility improvements. For example, there is a concerted drive throughout the State to reduce school dropouts and there is a movement underway to reduce the student/teacher ratio below the present level of 30/1. Also, recent population projections for Apex indicate significant future growth. It is recommended that local citizens and officials assist the Apex Advisory Council in its continuing effort to secure a sound education for every Apex youth. The recent passage of the Wake County School Bond Issue (\$8,418,000) was a wise first step in this direction.

It is also recommended that local officials, in cooperation with school authorities and railroad executives, have constructed a buffer strip along that part of the S.A.L. railroad line which borders the school grounds. In addition, one or two walkways are needed that would go over the tracks, permitting students and other persons to cross the area without danger.

Allegiance to the high standards, objectives and goals enumerated above should, together with active local citizen concern, result in an efficient and good local school system.





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STATE LIBRARY OF NORTH CAROLINA



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